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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,982	08/31/2000	Ramin C. Nakisa	8767.00	3080

7590 07/17/2003

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EXAMINER

HOLMES, MICHAEL B

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,982

Applicant(s)

NAKISA ET AL.

Examiner

Michael B. Holmes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/651,982.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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Examiner's Detailed Office Action

1. This action is responsive to application **09/651,982**, filed **August 31, 2000**.
2. **Claims 1-67** have been examined.

Information Disclosure Statement

3. Examiner acknowledges applicants' submission of prior art and information disclosure. Nevertheless, applicant is respectfully remind of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

Drawings

4. The formal drawings have been reviewed by the United States Patent and Trademark Office of Draftperson's Patent Drawings Review.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification. Appropriate correction is required.

Common Knowledge Block

6. **Expert System** i.e., An application program (traditionally associated with artificial intelligence, an inference engine(s), intelligent database(s), a knowledge base) that makes decisions or solves problems in a particular field, such a finance or medicine, by using a knowledge and analytical rules or rulesets defined by human experts in the field. Typically, it uses two components i.e., a knowledge base and an inference engine to form conclusions. Moreover, additional tools typically include user interfaces and explanation facilities, which enable the system to justify or explain its conclusions as well as allowing developers to run checks on the operating system. **Knowledge base**, a form of database used in expert systems that contains the accumulated knowledge of human specialist or experts in their respective filed of expertise. Moreover, the reasoning ability or problem solving approach to that a specialist or expert, would use is typically contained in the inference engine, which forms a crucial and necessary part of an expert system

Claim Interpretation

7. Office personnel are to give claims their “**broadest reasonable interpretation**” in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (“During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”). *see* MPEP § 2106

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was **patented or described** in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim **1-6, 21-29, 33-39, 60-67** are rejected under 35 U.S.C. 102(b) as being anticipated by **Amado (USPN 5,701,400), Date of Patent: December 23, 1997.**

As per claim 1, Amado discloses a knowledge-based system adapted to provide a recommen-

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dation tailored to a consumer (*an entity that utilizes economic goods*), the system comprising: a knowledge base containing historical data (**col. 3, line 53 to 62**); rule extraction means for extracting a ruleset from the knowledge base (**col. 2, line 50 to 64**); a rules database for holding the ruleset (**col. 2, line 50 to 64**); codifying means for codifying the requirements of the consumer (**col. 3, line 13 to 67**); recommendation means for applying the ruleset to the codified consumer requirements and generating the recommendation accordingly (**col. 3, line 13 to 67**); rule induction means for providing learning inputs to the knowledge base from a plurality of human experts as they advise and make real-life recommendations to actual or imaginary consumers, the learning inputs reflecting the recommendations made by the experts and the requirements of the consumers that they have advised (**col. 4, line 1 to 15**); and update means for running the rule extraction means on the knowledge base to refresh the rules database by extracting an updated ruleset from the knowledge base for application by the recommendation means to the requirements of future consumers (**col. 4, line 1 to 15**). [2. Referring to **EXPERT SYSTEMS and expert systems building tools** (**col. 2, line 50 to col. 5, line 59**); 3. Referring to **FUZZY SYSTEMS** (**col. 5, line 61 to col. 6, line 37**); 11. Referring to **KNOWLEDGE ACQUISITION AND AUTOMATIC DISCOVERY TOOLS SUCH AS DATABASE MINERS** (**col. 13, line 63 to col. 17, line 59**)]

Claims 2-6, 21-29, 33-34, fail to add novelty to applicant's claimed invention and therefore **REJECTED** for the same reasons as the **independent claim 1**.

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As per claim 35, Amado discloses a method of building a knowledge-based system for providing a recommendation tailored to a consumer (*an entity that utilizes economic goods*), the system operating by extracting rules from a knowledge base and applying the extracted rules to codified consumer requirements to generate the recommendation accordingly (**col. 3, line 13 to 67**); the method comprising: providing learning inputs to the knowledge base from a plurality of human experts as they advise and make real-life recommendations to actual or imaginary consumers, **the inputs reflecting the recommendations made by the experts and the requirements of the consumers that they have advised** (col. 4, line 1 to 15); **and after learning inputs have been provided to the knowledge base, extracting updated rules from the knowledge base for use in generating recommendations tailored to the requirements of future consumers** (col. 4, line 1 to 15). [2. Referring to EXPERT SYSTEMS and expert systems building tools (col. 2. line 50 to col. 5, line 59); 3. Referring to FUZZY SYSTEMS (col. 5. line 61 to col. 6, line 37); 11. Referring to KNOWLEDGE ACQUISITION AND AUTOMATIC DISCOVERY TOOLS SUCH AS DATABASE MINERS (col. 13, line 63 to col. 17, line 59)]

Claims 36-39, fail to add novelty to applicant's claimed invention and therefore **REJECTED** for the same reasons as the **independent claim 35**.

As per claim 60, Amado discloses a method of operating a knowledge-based system for providing a recommendation tailored to a consumer (*an entity that utilizes economic goods*), the method comprising: extracting rules from a knowledge base and applying the extracted rules to

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codified consumer requirements to generate the recommendation accordingly (**col. 3, line 13 to 67**); providing learning inputs to the knowledge base from a plurality of human experts as they advise and make real-life recommendations to actual or imaginary consumers, the inputs reflecting the recommendations made by the experts and the requirements of the consumers that they have advised (**col. 4, line 1 to 15**); and after learning inputs have been provided to the knowledge base, extracting updated rules from the knowledge base for use in generating recommendations tailored to the requirements of future consumers (**col. 4, line 1 to 15**).

[2. Referring to EXPERT SYSTEMS and expert systems building tools (col. 2, line 50 to col. 5, line 59; 3. Referring to FUZZY SYSTEMS (col. 5, line 61 to col. 6, line 37); 11. Referring to KNOWLEDGE ACQUISITION AND AUTOMATIC DISCOVERY TOOLS SUCH AS DATABASE MINERS (col. 13, line 63 to col. 17, line 59)]

Claims 61-67, fail to add novelty to applicant's claimed invention and therefore REJECTED for the same reasons as the independent claim 60.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 7-20, 30-32, and 40-59 are rejected under 35 U.S.C. 103(a) as being**

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unpatentable over **Amado** (USPN 5,701,400), Date of Patent: December 23, 1997, in view of **Qiang Shen** and **Alexios Chouchoulas**, “A Modular Approach to Generating Fuzzy Rules with Reduced Attributes for the Monitoring of Complex Systems” (May 2000), Division of Informatics, Informatics Research Report EDI-INF-RR-0122, in further view of **Ogilvie** (USPN 6,324,650), Filed: November 02, 1998, Date of Patent: November 27, 2001.

The **Amado** reference has been discussed above and discloses the limitations of **claims 1-6, 21-29, 33-39, 60-67**. However, **Amado** does not explicitly teach the limitations of **claims 7-20, 30-32, and 40-59**. Nevertheless, **Qiang Shen** and **Alexios Chouchoulas** discloses the limitations of **claims 7-20, 40-55, 57-58 [(pages 2-8 & pages 18-19)]**. Additionally, **Ogilvie** discloses the limitations in **claims 30-32, 56 & 59 [(col. 2, line 45-65); FIG. 1, (col. 5, line 20-54); (col. 10, line 12-24) & FIG. 5, (col. 12, line 1-14)]** Accordingly, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to combined the teachings of **Amado** with that of **Qiang Shen** and **Alexios Chouchoulas** and **Ogilvie**, for the purpose of producing an **Expert System**, imbued with fuzzy-rules induction, knowledge acquisition, and knowledge-based systems, capable of being executed over a contemporary computer network system, accessing the Internet and World Wide Web applications, whereby allowing the consumer to ability access and manipulate data and web pages.

Conclusion

12. The prior art made of record and (listed of form **PTO-892**) not relied upon is considered pertinent to applicant's disclosure as follows. Applicant or applicant's representative is respect-

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fully reminded that in process of patent prosecution i.e., amending of claims in response to a rejection of claims set forth by the Examiner per Title 35 U.S.C. The patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and any objections made. Moreover, applicant or applicant's representative must clearly show how the amendments avoid or overcome such references and objections. *See 37 CFR § 1.111(c).*

Correspondence Information

13. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Michael B. Holmes** who may be reached via telephone at **(703) 308-6280**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft) facsimile transmission the fax is **(703) 746-7240**. Finally, if attempts to reach the examiner by telephone prove to be unsuccessful, **Examiner's Supervisor, Anil Khatri**, may be reached at **(703) 305-0282**.

Any response to this office action should be mailed too:

Director of Patents and Trademarks Washington, D.C. 20231. Hand-delivered responses should be delivered to the Receptionist, located on the fourth floor of **Crystal Park II, 2121 Crystal Drive Arlington, Virginia**.

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Michael B. Holmes

Patent Examiner

Artificial Intelligence

Art Unit 2121

United States Department of Commerce

Patent & Trademark Office

Tuesday, June 17, 2003


MICHAEL B. HOLMES
PATENT EXAMINER